

Site Selection for Off- Bottom Oyster Farming

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LOCATION! LOCATION! LOCATION!

- **Site selection is key to success!**
- **It is your first decision & most important one**
 - **Choose your site before selecting gear type**
 - **Gear can have site limitations**



Site Selection: What to Consider

- 1. Growing water classification**
- 2. Salinity**
- 3. Fetch**
- 4. Water depth**
- 5. Bottom type**
- 6. Access**
- 7. Security**

Growing Water Classification

- **Bivalve shellfish are the most regulated food in America**
 - **Filter feeders**
 - **Bioaccumulate from surrounding waters**
 - **Eaten raw & eaten entirely**
 - **Public health concern**
- **National Shellfish Sanitation Program**
 - **State Shellfish Control Agency (Board of Health)**
 - **Classifies growing areas**
 - **Approved or conditionally approved classification (Open or Closed)**
 - **Maps located at coastal county public health office or state agency**

Salinity

- **Over 10 parts per thousand, higher for saltier oysters**
 - Local shellfish control authority data base
- **Generally, if wild oysters are common, site is salty enough**
 - Not always true, due to other factors that can inhibit wild oyster production
 - High salinity (>30ppt) oyster diseases & predators
 - Lack of natural reefs due to poor bottom type
- **Stay away from mouths of rivers**
 - Freshets
 - Extended periods (3 weeks) can cause high oyster mortality
 - Conditional closure to harvesting
 - Impact flavor (less salty taste)

Fetch



Open Water Allows for Greater Wind Energy Effects

The Good & Bad of Choppy Seas

Good

- Tumbling prunes oysters for ideal shape without added labor
- Can be addressed with proper gear selection & use and stocking density

Bad

- Over pruning can misshapen shells, reduce time to market
- Can challenge gear (damage), use & access

Calmer sea state ideal for standard operating conditions

- Leeward shores provide better protection from storms than windward shores
 - Improve boating conditions while working with gear

Water Depth

Biggest factor in gear selection

- **Low winter tides (January/February) after frontal passage best time for site selection**
 - **Identify areas where its too shallow for gear and vessel access**
- **Deeper water makes installing & working gear more challenging**
 - **Can limit gear choices**
 - **Can require specialized vessel adaptations**
- **Wadeable depths are ideal**
 - **Knee to chest deep depending on tides**
 - **Allow shallow-draft vessel access**

Bottom Type

- **Least critical site characteristic**
 - More critical if wading
- **Must be hard enough to support anchorage**
 - Anchor type & method critical
 - Firm bottom types (sand or clay/mud) are ideal
 - Avoid “gumbo mud”
 - Use a long cane pole from a vessel to probe bottom
 - Cut the cane between two joints, allowing to get a sediment sample in the hollow end. Rub sample between finger & thumb for paste consistency.



Access

- **Public water bottom will require a lease from the state if permitted**
 - Check state & local agencies regulating zoning and oystering
- **Private water bottom will require a lease after proof of ownership with state lands office.**
- **If vessel is planned, how far is the nearest boat launch?**
 - Crossing open water can be impacted by weather conditions, sea state
- **How far to unload harvest and refrigerate?**
 - Time/temperature rules apply April-October
 - Refrigeration required within 1 hour of beginning harvest
 - Onboard icing is permitted

Security

Threat of theft is #1 deterrent to success in some states

- **Remote locations cause for concern**
 - Thieves can use cell phones to communicate where you are
 - “Outsiders” of a community garner little respect
- **The more eyes the better!**
 - **Initiate local community**
 - Be neighborly!
 - Share the love of oysters
 - Make them feel part of your team
 - Give tours
- **Wildlife cameras have limitations**
- **Partnerships can be effective**